Operations Report

Andy Hocker

21-AUG-2003

CDF Weekly Meeting

Store summary

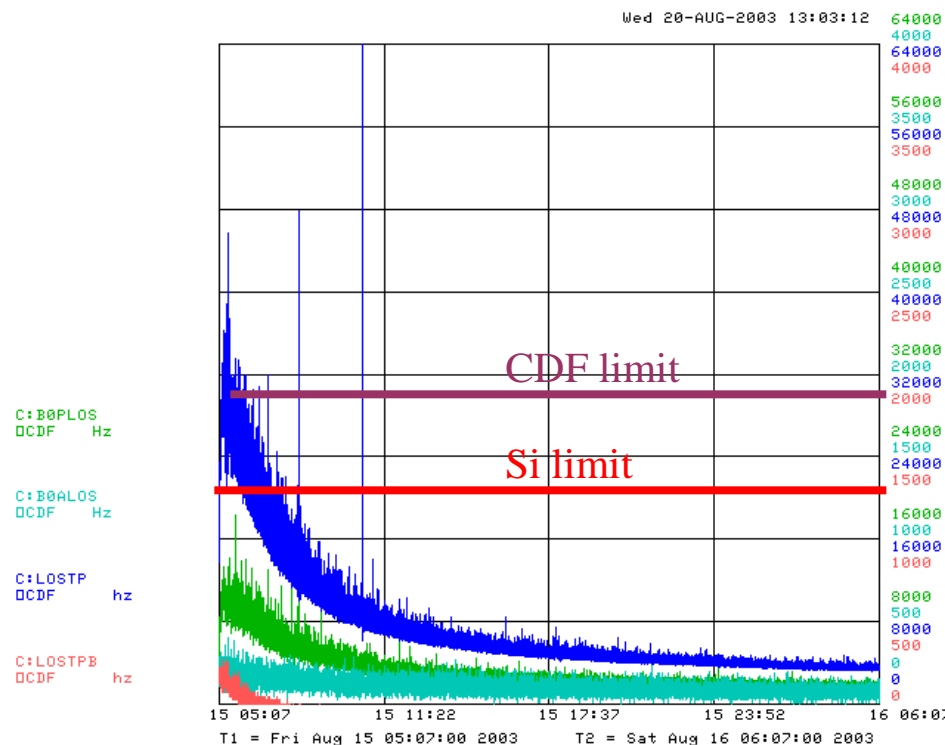| Date	Dur (h)	Inst Lum (initial)	Int Lum (delivered)	Lum to tape (ε)	Si Phys Lum (ε)	
Th 8/14	4.8	41.3e30	567	525 (92.5%)	525 (92.5%)	🟢
Fr 8/15	25.0	41.0e30	1723	1535 (89.1%)	1387 (80.5%)	🔵
Sa 8/16	4.6	40.3e30	503	433 (86.1%)	218 (43.3%)	🟢🔵
Su 8/17	22.5	37.8e30	1619	1291 (79.8%)	1282 (79.2%)	🔵
Mo 8/18	5.2	42.2e30	608	532 (87.6%)	532 (87.6%)	🟢🔵
Tu 8/19	0.4	44.4e30	65	23 (35.3%)	0 (0.0%)	🟢🔵
We 8/20	16.0	28.3e30	984	931 (94.6%)	931 (94.6%)	
Th 8/21		42.4e30				🔵
Total			6.1 pb^{-1}	5.3 pb^{-1} (86.8%)	4.9 pb^{-1} (80.3%)	

🟢 quench 🔵 losses

Losses

- High beginning-of-store losses prevent us from immediate running with silicon
  - Or running at all, sometimes
- Usual cure of tuning them away not working
- TeV experts have dedicated some time to studying this --- currently no answers
- Since high losses are not *necessarily* dangerous, Rainer W. has agreed to make the judgement call at the beginning of every store
  - Saves us 30-60 minutes sometimes

Other beam-related woes

- 11 out of the last 14 stores have ended with a quench or abort
  - Large number of different component failures
- Crate PS died on Monday owl, causing very unstable beam (huge spikey losses, abort gaps filling, etc.)
  - Had to sit out the last 1.5 hours of store
- Two SVX rad aborts during shot setup on Tuesday due to proton injection kicker failing to fire
  - Took about 300 rad in total
  - No damage incurred

Stuff to do before shutdown

- Beam tests:
  - Optimize two-track trigger
  - New and improved physics triggers (Z -> bb, Higgs multijet, SUSY dilepton…)
  - Test L2 muon board
  - Test Rev. E TDCs with modified TRACER
  - Myron-mode calorimeter runs
  - SVX bias scans
  - Two SRC tests
- It has become extremely difficult as of late to do these kinds of tests at end-of-store
  - Managed to work in EVB high-rate tests, new TT tests

Conclusions

- CDF running well --- losses/quenches making our efficiency look bad

- As of today, default physics table drops uncompressed COTD, SIXD, and ISLD banks from all streams except A and D
  - People who look at these banks should take note

- About 223 pb-1 delivered for FY03
  - Accelerator studies soon to be more common

- It has been a pleasure managing your ops for the past six months
  - Good luck to JJ

A. Hocker, CDF Weekly Meeting